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REMARKS

Claims 1 - 28 are pending in the present Application. Claims 1 and 11 have been amended, leaving Claims 1 - 28 for consideration upon entry of the present Amendment.

Claim 1 was amended to remove unnecessary language.

Claim 11 was amended to retain proper antecedent basis for the language.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1 - 28 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 4,669,890 to Peyrot (hereinafter referred to as Peyrot).

With regard to the Examiner's assertion that "[t]he claims simply state an 'up flow reactor' with no specific limitations therein." (Office Action, Page 3), there are several elements of the claims. Elements of the claim include a vessel, a catalyst bed, and a reactant distribution/product collection system. The reactant distribution/product collection system comprises a distributor disposed at a lower end of the vessel and in fluid communication with an inlet, and a collector disposed at an upper end of the vessel. The claims are clear, definite, and include specific elements.

Peyrot discloses a down-flow fluid mixing apparatus comprising two or more distinct beds of particulate material separated by a vertical flow barrier that comprises a fluid impingement compartment located at the center of the barrier, wherein the flow barrier is capable of collecting, mixing, and redistributing the entire flow of fluid from a first bed to a second bed (Abstract):

Therefore, in its broadest sense, this invention is directed to a centrally located mixing section for receiving substantially the entire flow of fluid passing into a downstream bed which thoroughly mixes the fluid and passes it to the downstream particle bed in a balanced fashion to facilitate redistribution of the fluid. The mixing of the fluid is essentially derived by the configuration of the mixing zone.

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(Column 3, Lines 45 – 52) With specific reference to FIG. 1 the cutaway elevation view shows the column 1 with a fluid inlet nozzle located at its top and a fluid outlet located at its bottom. (Column 4, Lines 28 – 30).

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art. *In re Fite*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

It is first noted that Peyrot does not teach all of the elements of the instant claims. Peyrot at least fails to teach a “distributor being disposed at a lower end of said vessel and comprising a perforation”, or a “collector being disposed at an upper end of said vessel and comprising a perforation” as is claimed in independent Claim 1. Additionally, Peyrot does not teach, suggest, or provide incentive that would have motivated one skilled in the art to modify Peyrot to include these non-obvious elements.

Also, Peyrot teaches a downflow fluid mixing apparatus and fails to provide motivation or expectation of success to redesign their mixing apparatus to be an up-flow reactor as taught and claimed in the present application. No *prima facie* case of obviousness has been established. Reconsideration and withdrawal of this rejection are respectfully requested.

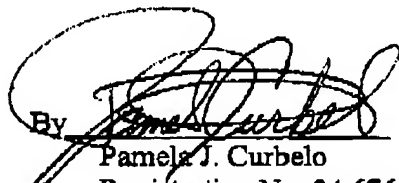
It is believed that the foregoing remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejections and allowance of the case are respectfully requested.

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If there are any additional charges with respect to this Amendment or otherwise,
please charge them to Deposit Account No. 07-0893.

Respectfully submitted,

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